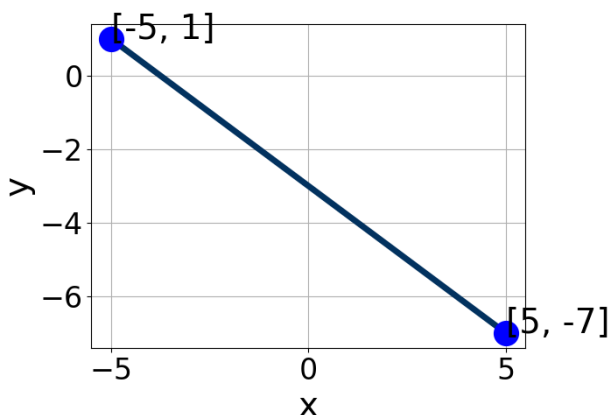


1. Solve the equation below. Then, choose the interval that contains the solution.

$$-12(7x + 16) = -8(19x - 10)$$

- A.  $x \in [1.3, 2.6]$
  - B.  $x \in [2.8, 4.9]$
  - C.  $x \in [-2, -1.3]$
  - D.  $x \in [-1.1, 1.2]$
  - E. There are no real solutions.
- 

2. Write the equation of the line in the graph below in Standard Form  $Ax + By = C$ . Then, choose the intervals that contain  $A$ ,  $B$ , and  $C$ .



- A.  $A \in [-6.2, -3.8]$ ,  $B \in [-6.6, -4]$ , and  $C \in [14, 17]$
  - B.  $A \in [1.8, 4.5]$ ,  $B \in [3.4, 5.6]$ , and  $C \in [-15, -14]$
  - C.  $A \in [-1.7, 3.2]$ ,  $B \in [-3.6, -0.6]$ , and  $C \in [1, 7]$
  - D.  $A \in [1.8, 4.5]$ ,  $B \in [-6.6, -4]$ , and  $C \in [14, 17]$
  - E.  $A \in [-1.7, 3.2]$ ,  $B \in [0.5, 2]$ , and  $C \in [-7, 0]$
- 

3. Solve the equation below. Then, choose the interval that contains the solution.

$$-11(-6x - 15) = -16(13x - 8)$$

- A.  $x \in [1.86, 2.31]$
  - B.  $x \in [-0.16, 0.17]$
  - C.  $x \in [-1.34, -0.84]$
  - D.  $x \in [0.74, 1.35]$
  - E. There are no real solutions.
- 

4. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{5x - 7}{4} - \frac{-7x + 3}{5} = \frac{5x - 4}{2}$$

- A.  $x \in [1.4, 3.3]$
  - B.  $x \in [-5.7, -5.3]$
  - C.  $x \in [37.3, 40.8]$
  - D.  $x \in [-0.6, 0.6]$
  - E. There are no real solutions.
- 

5. First, find the equation of the line containing the two points below. Then, write the equation in the form  $y = mx + b$  and choose the intervals that contain  $m$  and  $b$ .

$(8, 7)$  and  $(-4, -8)$

- A.  $m \in [-4.2, -0.9]$   $b \in [-13.99, -12.84]$
  - B.  $m \in [-0.7, 3.4]$   $b \in [-5.93, -3.61]$
  - C.  $m \in [-0.7, 3.4]$   $b \in [1.04, 3.61]$
  - D.  $m \in [-0.7, 3.4]$   $b \in [-1.64, 0.07]$
  - E.  $m \in [-0.7, 3.4]$   $b \in [-3.33, -2.61]$
-

6. Find the equation of the line described below. Write the linear equation in the form  $y = mx + b$  and choose the intervals that contain  $m$  and  $b$ .

Parallel to  $6x - 5y = 7$  and passing through the point  $(9, 3)$ .

- A.  $m \in [1.14, 1.5]$   $b \in [-10.2, -6.2]$
  - B.  $m \in [0.54, 1.14]$   $b \in [-10.2, -6.2]$
  - C.  $m \in [1.14, 1.5]$   $b \in [-6.9, -5.9]$
  - D.  $m \in [-1.23, -0.79]$   $b \in [13.5, 15.2]$
  - E.  $m \in [1.14, 1.5]$   $b \in [6.6, 8.7]$
- 

7. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{5x - 6}{5} - \frac{8x + 3}{4} = \frac{-9x + 5}{7}$$

- A.  $x \in [47, 53]$
  - B.  $x \in [7.32, 11.32]$
  - C.  $x \in [0.44, 3.44]$
  - D.  $x \in [3.07, 6.07]$
  - E. There are no real solutions.
- 

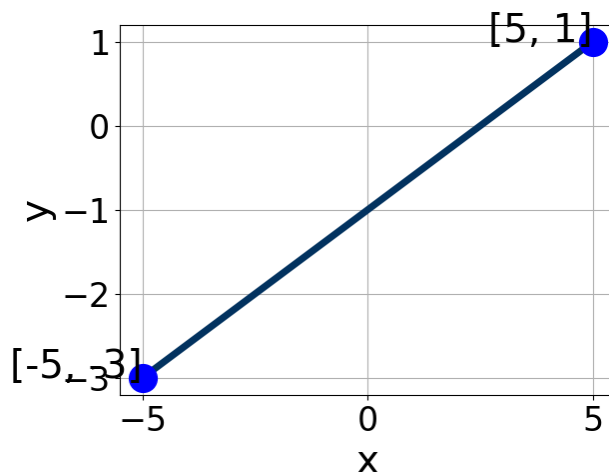
8. First, find the equation of the line containing the two points below. Then, write the equation in the form  $y = mx + b$  and choose the intervals that contain  $m$  and  $b$ .

$(-6, 10)$  and  $(-11, -10)$

- A.  $m \in [1, 12]$   $b \in [-38, -33]$
- B.  $m \in [1, 12]$   $b \in [32, 38]$
- C.  $m \in [1, 12]$   $b \in [15, 18]$
- D.  $m \in [-7, -2]$   $b \in [-54, -48]$

E.  $m \in [1, 12]$   $b \in [-4, 6]$

9. Write the equation of the line in the graph below in Standard Form  $Ax + By = C$ . Then, choose the intervals that contain  $A$ ,  $B$ , and  $C$ .



- A.  $A \in [-1.6, 0.3]$ ,  $B \in [0.5, 1.4]$ , and  $C \in [-2.3, 0.75]$   
 B.  $A \in [-1.6, 0.3]$ ,  $B \in [-3.1, 0.8]$ , and  $C \in [0.97, 1.79]$   
 C.  $A \in [1, 2.5]$ ,  $B \in [4.4, 5.7]$ , and  $C \in [-5.13, -4.33]$   
 D.  $A \in [-3.9, -1.4]$ ,  $B \in [4.4, 5.7]$ , and  $C \in [-5.13, -4.33]$   
 E.  $A \in [1, 2.5]$ ,  $B \in [-6.2, -4.9]$ , and  $C \in [3.89, 6.19]$

10. Find the equation of the line described below. Write the linear equation in the form  $y = mx + b$  and choose the intervals that contain  $m$  and  $b$ .

Parallel to  $4x + 3y = 3$  and passing through the point  $(8, -5)$ .

- A.  $m \in [-1.67, -0.87]$   $b \in [-14, -7]$   
 B.  $m \in [-1.67, -0.87]$   $b \in [-5.67, -2.67]$   
 C.  $m \in [1.1, 1.75]$   $b \in [-20.67, -13.67]$   
 D.  $m \in [-0.95, -0.37]$   $b \in [2.67, 6.67]$   
 E.  $m \in [-1.67, -0.87]$   $b \in [2.67, 6.67]$